

NAVAL WAR COLLEGE  
Newport, R.I.


FORCIBLE ENTRY IN THE 21<sup>ST</sup> CENTURY

By

Scott A. Edwards  
Lieutenant Commander, USN

A paper submitted to Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: 

5 February 2001



Colonel W.R. Spain, USMC  
Chairman, JMO Department

20010511 026

REPORT DOCUMENTATION PAGE

1. Report Security Classification: UNCLASSIFIED			
2. Security Classification Authority:			
3. Declassification/Downgrading Schedule:			
4. Distribution/Availability of Report: DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.			
5. Name of Performing Organization: JOINT MILITARY OPERATIONS DEPARTMENT			
6. Office Symbol: C		7. Address: NAVAL WAR COLLEGE 686 CUSHING ROAD NEWPORT, RI 02841-1207	
8. Title (Include Security Classification): FORCIBLE ENTRY IN THE 21 <sup>ST</sup> CENTURY (U)			
9. Personal Authors: LCDR Scott A. Edwards, USN			
10. Type of Report: FINAL		11. Date of Report: 5 February 2001	
12. Page Count: 21		12A Paper Advisor (if any): Colonel W.R. Spain, USMC	
13. Supplementary Notation: A paper submitted to the Faculty of the NWC in partial satisfaction of the requirements of the JMO Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.			
14. Ten key words that relate to your paper: Forcible Entry, Amphibious Assault, Landing Craft Air Cushion, Landing Craft Utility, Amphibious Assault Vehicle, Operational Maneuver From The Sea, Over The Horizon assault, Ship To Objective Maneuver, Sea-Based Logistics, Amphibious Task Force			
15. Abstract: This paper addresses the viability of a forcible entry operation within the context of the missions required of amphibious forces in today's threat environment. In the past, massive fleets carrying the landing forces were able to overcome the well-prepared defender by directly assaulting the beach and securing a lodgment through attrition warfare. The current state of the amphibious forces does not allow this type of warfare to exist today. The capabilities and limitations of the amphibious ships and assault craft do not make forcible entry operations feasible. The paper examines the operational functions and elements of Operational Maneuver From The Sea, amphibious lift requirements, and the advantages and disadvantages of assault craft currently in the naval inventory. The paper highlights those characteristics most likely to cause the problems during a forcible entry operation and proposes solutions to overcome these obstacles. It concludes with the assertion that forcible entry operations are currently not feasible with the state of the amphibious forces with regards to the tenets of maneuver warfare.			
16. Distribution / Availability of Abstract:	Unclassified  X	Same As Rpt	DTIC Users
17. Abstract Security Classification: UNCLASSIFIED			
18. Name of Responsible Individual: CHAIRMAN, JOINT MILITARY OPERATIONS DEPARTMENT			
19. Telephone: 841-6461		20. Office Symbol: C	

Security Classification of This Page Unclassified

## ABSTRACT

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This paper addresses the viability of a forcible entry operation within the context of the missions required of amphibious forces in today's threat environment. In the past, massive fleets carrying the landing forces were able to overcome the well-prepared defender by directly assaulting the beach and securing a lodgment through attrition warfare. The current state of the amphibious forces does not allow this type of warfare to exist today. The capabilities and limitations of the amphibious ships and assault craft do not make forcible entry operations feasible.

The paper examines the operational functions and elements of Operational Maneuver From The Sea, amphibious lift requirements, and the advantages and disadvantages of assault craft currently in the naval inventory. The paper highlights those characteristics most likely to cause the problems during a forcible entry operation and proposes solutions to overcome these obstacles. It concludes with the assertion that forcible entry operations are currently not feasible with the state of the amphibious forces with regards to the tenets of maneuver warfare.

## Introduction

The U.S. cannot successfully conduct a forcible entry operation using the current amphibious warfare doctrine or the Marine Corps future concept of operations, Operational Maneuver From The Sea (OMFTS). The assets that will be used are not capable of the requirements that will be placed on them nor will the environment always support an operation advantageous to our objectives. Although amphibious operations in the 20<sup>th</sup> Century have been extremely successful in getting across the hostile barrier and sustaining further operations; this fact will lead planners to make false assumptions if they do not take into consideration the affects of technology on the possible tactics of a future enemy. This paper will briefly discuss the proposed tactics of current amphibious doctrine and identify shortcomings of current assets while also proposing solutions for the Joint Force Commander to consider.

## Background

At the conclusion of World War II, the U.S. emerged as one of the super powers of the world and with an economy that came to rely on global trade. The presence of conflict in various countries throughout the world threatened the peace and thus, our stake in the world economy. As a super power, the U.S. also saw conflict as a possible threat to the balance of power in a particular region of the world and saw intervention as a way of maintaining the status quo and the peace. The U.S. has repeatedly taken the lead in responding to the various crises and has occasionally used military force to accomplish the objectives put forth by the National Command Authority (NCA). Due to increased tensions in the world caused by the ever-increasing number of failed-states, a credible overseas presence has influenced events in the countries that are in the littoral region. With the littorals home to 75 percent of the

world's population and the location of 80 percent of the world's capitals, this meant that the majority of the world's conflict were found in this area and influenced by naval forces.

The NCA has repeatedly called upon the naval forces to respond to area conflicts because of they were forward deployed and able to respond quickly. Along with their responsiveness, they also have the capability of long on-station time coupled with self-sustainment. Of the 258 uses of U.S. armed forces in crisis response between 1946 and 1982, naval forces participated in 81 percent, according to a Brookings Institution study.<sup>1</sup> Since the crises ashore have often required land forces to complete the mission, whether it was security enhancement or non-combatant evacuation, the amphibious forces have often been the force of choice. A Center for Naval Analysis study that examined 207 U.S. crisis responses between 1946 and 1990 found that amphibious ships participated in 112, or 53 percent, of the cases.<sup>2</sup> The amphibious forces brought with them a capability of independent operations without the need to gain host nation support in the form of access to airfields or ports. These various operations allowed the U.S. to help maintain the order in certain parts of the world and often prevented further conflict by the presence of forces alone.

Shortly after World War II, numerous high-ranking military officials attempted to discard the amphibious forces since they claimed there would not be any future operations requiring their use due to the development of the atomic bomb.<sup>3</sup> This philosophy obviously did not stand the test of time. Although the missions of the amphibious forces have often been peaceful with minimal military action required, they have occasionally required a more offensive capability to restore peace and order, the forcible entry. Since World War II, there have been four US military operations that have required forcible entry using amphibious forces: Inchon in 1950; smaller operations in the Dominican Republic in 1965; the Mayaguez

rescue on Koh Tang Island in 1975; and Grenada in 1983.<sup>4</sup> While aviation assets were the predominant force in the Mayaguez rescue, it became clear through the use of ships in that operation that aviation assets alone could not complete the operation. A naval component has the movement and maneuver, logistic, and protection capability that aviation assets cannot exploit without gaining host nation or neighboring nation support. In the absence of an adjacent land base, a sustainable forcible entry capability that is independent of forward staging bases, friendly borders, overflight rights, and other politically dependent support can come only from the sea.<sup>5</sup> It was on these premises that a forcible entry capability from the sea was required and has been mandated for the naval forces to maintain.

### Doctrine

World War II began with the U.S. fielding a doctrine for amphibious assault while still developing the amphibious shipping and the landing craft to support it. By the end of the war, it had not only developed a well-practiced doctrine, it had also built a new fleet of amphibious and support ships and boats to implement it. The doctrine of that time was based on attrition warfare that entailed the complete capture and occupation of the land objectives. This type of operation called for massive amounts of shipping and landing craft due to the extremely large forces that were needed to break through the defended beachhead and then to also support the land operations. While the operational functions of movement and maneuver and logistics were often exploited to our advantage throughout the campaigns, the factors of time and space often worked in the defenders advantage and lead to the build up of defenses at the water's edge that the Allies ultimately had to breach. Forcible entry was developed to counter these obstacles but required enormous amounts of shipping and landing craft to survive the assault and accomplish the mission of creating a lodgment ashore to

operate from. The Korean War and the landings at Inchon and Wonsan reinforced the continued need for a forcible entry capability to exist in the U.S. naval forces.

While the amphibious forces continued to develop, doctrine did not radically change until the advent of the helicopter and then later, the Landing Craft Air Cushion (LCAC). The helicopter added the capability of vertical assault from over the horizon (OTH) and later the LCAC provided the surface assault the same capability. In 1995, the Marine Corps formally put forth the concept of OMFTS that combined the significant advantages of maneuverability of an Amphibious Task Force (ATF) in relation to the often-static defenses of a defender, with the OTH capability provided by the amphibious assets. OMFTS also incorporated the Ship-To-Objective Maneuver (STOM) concept that replaced the previous Ship-To-Shore Maneuver found in the current Joint Amphibious Operations Doctrine. The change from frontal assault forcible entry that relied on attrition warfare, to that of using movement and maneuver to bypass the defenses at the beach, was finally made. This new concept proposed exploiting the advantages of vertical assault, operational maneuver and the elements of operational deception and surprise to bypass enemy strengths and overcome his weaknesses while moving directly to the objective vice establishing a lodgment on the beach and moving inland from there.

OMFTS brought to the forefront many operational advantages and disadvantages of our amphibious forces. The days of attrition warfare that did not exploit operational surprise and deception and were able to use movement and maneuver in a limited fashion to achieve success are over. The previous doctrine of trading time to slowly build up a large enough force to achieve unity of effort has been replaced by the ability to quickly move against the enemy decisive points, or the center of gravity itself. This manner of assault does not require

large forces or a large logistical effort due to the anticipated short duration of the operation. Operational intelligence, command and control, and fires are more critical now in order to exploit deception and surprise to our advantage. OMFTS stresses that by quickly catching the enemy off guard and striking at his weak points early in the conflict, we can use the functions of operational art previously mentioned to decisively turn the conflict to our advantage. This strategy will most likely succeed during low-intensity conflicts or military operations other than war (MOOTW), but is untested in a forcible entry environment. With the exception of the Falklands War, there has not been a modern conflict that has depended substantially on an opposed amphibious assault for success.<sup>6</sup> The Argentine forces opposing the British landing were so small and lightly armed that it does not reflect a true test to a forcible entry operation using today's tactics and doctrine. While it appears from the theoretical point of view that our new doctrine will prevail in the next forcible entry operation, the real problems lie with the assets that are currently in the naval inventory that will be used to implement the doctrine.

#### Amphibious Lift

Shortly after World War II, the U.S. Navy began to reduce and replace the amphibious fleet with more modern, multi-function ships. While some of these assets were retired, most were sold to foreign nations. The Navy saw the need and utility for small, forward deployed task forces and began to build fast, multi-function, amphibious ships that incorporated crew and troop habitability and could deploy for long periods of time. Thus, the trade off of quantity versus that of mobility first came into play when the U.S. decided to conduct a forcible entry amphibious assault at Inchon in 1950 and discovered that it did not have the amphibious lift required. By using older amphibious ships sold to Japan, the U.S.

was able to conduct the operation successfully and get the 1<sup>st</sup> Marine Division ashore.<sup>7</sup>

While the Navy was able to successfully complete the Inchon operation, it also saw the need to maintain an amphibious force large enough and capable enough of meeting any and all challenges throughout the world. Today, that need equates to the requirement to be able to move 2.5 Marine Expeditionary Brigade (MEB) equivalents of lift.

The Navy has not been able to attain the required lift since the early 1990's, which continues to limit our ability to mass forces in support of a forcible entry operation. The current amphibious lift capability is 1.95 MEB equivalents and will not return to 2.5 MEB equivalents until 2009 based on the current construction plan.<sup>8</sup> Also in the early 1990's, the Navy retired older amphibious ship classes (LST, LPH, and LKA) due to their lack of multi-functionality, manning requirements, and increased maintenance costs due to their age, in order to fund the new LPD-17 ship class and LHD-7.<sup>9</sup> While this may have seemed like the solution to the long term problem of antiquated ships that have outlived their usefulness, it left the amphibious forces of today without enough shipping to move the required 2.5 MEB equivalents.

The amphibious fleet has declined from sixty ships in 1992 to about 39 ships [in 1994] and is projected to reach its nadir of 35 ships in 2008.<sup>10</sup> While these numbers may seem inconclusive due to the superior, multi-function ships replacing the older ships, it does indicate the constant reduction of vehicle square footage available to the landing force that is currently plaguing the amphibious fleet. The current crisis of not enough amphibious lift was clearly evident during the Gulf War as stated by Radm John B. LaPlante, the commander of the amphibious force in DESERT STORM, when he said he had "13 ships with a shortfall of at least 7 ships worth of MajGen [Harry W., Jr.] Jenkin's equipment that I could not get into

the amphibious ships.”<sup>11</sup> Success of a forcible entry depends on the correct type and amount of equipment that can be brought to bear against a defender. With the reduction of amphibious lift, the reduced amount of equipment that the amphibious fleet can carry may put the forcible entry in jeopardy of failure. The lack of amphibious shipping further emphasizes the point that our naval forces of today cannot engage in an attrition based conflict; they must achieve the objectives quickly and decisively or be faced with not enough assets to sustain a long and drawn-out conflict.

An alternative to the lift shortfall has been the Maritime Prepositioning Ships (MPS) and commercial lift to supplement the current fleet of amphibious ships. While the ships of the MPS have an organic offload capability in an amphibious operating area (AOA), it is very dependent on sea state and will only be used after an assault. Ports capable of supporting modern merchant ships will not always be available, and efforts at off loading “black bottom” shipping in a tactical amphibious situation usually have been unsuccessful.<sup>12</sup> By routing the MPS ships to the closest open port in the theater, some the amphibious ships that were used in the initial assault will be available to shuttle the follow-on forces to the AOA for further deployment. While time intensive, this is the most readily available option until more amphibious shipping becomes available.

Another option that is organic to the amphibious ships themselves is the redistribution of vehicle square footage on a ship. With the advent of the LCAC, the well deck area that was previously allocated for conventional landing craft on the LPD-4 and LSD-36 class is now available to stow more landing force equipment. The only condition to this option would be the necessity to keep the equipment dry while conducting the offload, a condition easily attainable by the requirement to have the ship ballasted down to the sill, essentially a

dry well deck, to support LCAC operations. The flight decks on the ships, less the LHA/LHDs, are also available for equipment stowage. By fouling one of the two available spots on these ships, additional cargo space is available for use. This option will best be implemented on the LSD so that the LPD can fully maintain its aviation capability and act as a secondary aviation support facility for the ATF.

### Landing Craft

OMFTS envisions the landing force having the speed and mobility to exploit movement and maneuver and conduct OTH and when required, forcible entry. While that is the ultimate goal in the future, the landing craft in today's inventory is comprised of those that can achieve this goal, the LCAC, and those that still are founded in the conventional method of amphibious assault and cannot participate in an OTH assault, the Landing Craft Utility (LCU) and the Amphibious Assault Vehicle (AAV).

The LCAC uses speed and superior mobility to allow the ATF the capability to maintain surprise, deception, and protection by remaining over the horizon. The LCAC's high speed presents an advantage to the ATF that was not possible in the past, crossing a large space in a short amount of time and landing a sizable force before the enemy can react. The LCAC's coastal penetration capabilities will expose up to 70 percent of the world's beaches, rather than the 17 percent available to the current LCU/AAV craft.<sup>13</sup> The LCAC's high speed and payload capacity allows more forces to reach the shore in a shorter time, and with shorter intervals between trips.<sup>14</sup> This higher sortie rate will lead to greater combat power build-up in a shorter amount of time than was attainable in the past.

The LCAC has significant protection and logistical problems that will limit its use in a forcible entry operation. While the LCAC allows the ATF to exploit operational deception

and surprise, it lacks those same attributes at the tactical level. The LCAC will present a fast but large, noisy target with a characteristic "rooster tail" of spray and dust.<sup>15</sup> While the LCAC has a huge speed advantage over conventional displacement craft, it still requires a significant amount of time to go long distances. If the ATF were to remain truly over the horizon at a distance of 20-30 miles, one round trip from ship to shore will take an hour. Logistically, the LCAC requires a great amount of fuel when making these long transits. The refueling evolution will impact its advantage of time/space capability because it is a time-intensive evolution, thus fewer sorties. Similarly, the amount of force it can carry to the beach is limited and directly proportionate to its fuel capacity. Heavy combat loads on the craft, such as tanks and AAVs, require it to reduce its fuel load in order to get within structural weight limits for operation. Therefore, this design restriction will limit its maneuver advantage and directly result in fewer sorties.

In addition, the ability of the craft to sustain damage and continue operations is suspect. While the older landing craft were made of steel and provided some protection, the LCAC is highly susceptible to damage from small arms and light automatic weapons since it is made out of aluminum. The rubber skirt around the bottom of the craft is its Achilles Heel. Any significant damage to it will cause the craft to operate in the displacement mode at which point it would have the same characteristics and limitations of a conventional landing craft. Consequently, the LCAC will perform superbly when operating in a tactically benign environment with the ATF close to shore but will not survive in a forcible entry environment due to its poor protection and lift capability and its logistical burden with regards to fuel.

While the LCAC is becoming the primary means of surface assault, the LCU is still being deployed with the ATF and will figure into the equation. The LCU has the tactical advantages of heavy lift (force) and distance (space) but operates at a slow speed, thus taking a long time to reach the objective. This craft moves the heavy, non-time critical cargo (up to 130 tons) and allows the LCACs to move the more time sensitive equipment. The craft has the capability of conducting independent operations since it has it's own support facilities onboard and carries a large amount of fuel. Because of this capability, it is often used to support special operations close to shore under the cover of darkness. As mentioned, the disadvantage of speed will endanger the elements of deception and surprise. The LCU is only capable of 12 knots and will risk the loss of surprise if part of the first wave of an OTH assault during the day. The LCU has the requirement to operate in a wet welldeck that will require a great amount of time for the ship to achieve. Due to the LCU's slow speed, the ship will have to be as close to the beach as possible to facilitate quick sorties. Accordingly, the LCU is more often seen in a logistical role after the beach is secured and the amphibious ships can close the beach. Consequently, its high cargo capacity does not overcome its time/space limitation and thus, will not support a forcible entry operation.

The Amphibious Assault Vehicle (AAV) is the heavy punch that the Marines bring to the fight. It provides protection to the landing force yet does not have the speed or range to exploit time and space factors. The limited, water-borne range of these vehicles (4,000 yards) and slow speed (7 knots) requires the launch ship to close the beach in order to launch them. The AAV provides the force factor to an operation yet will sacrifice surprise and deception to achieve this goal. Consequently, while the AAV will provide the firepower and

armored transportation needed ashore, but will essentially have the same liabilities as an LCU while water-borne.

Possible present day solutions to these limitations include various times and methods of employment of these landing craft during an assault. An OTH assault can be conducted under the cover of darkness and allow all types of landing craft to participate. The high level of training of the landing craft crews and the utilization of night vision devices has lead to the capability of conducting a night launch followed by an early morning assault. In this case, movement and maneuver, deception, surprise, and unity of effort are exploited to our advantage. Another assault option involves exploiting the LCAC's maneuverability while maintaining the force multiplier of the AAVs during the initial assault. The LCACs would carry the AAVs in the first wave and the LCUs would come ashore in the second or third. The LCU would be able to launch first and proceed inland undetected since it has a small silhouette. The LCACs would then launch at a later time and overtake the LCU as it was about to cross over the horizon. At that range, the LCU would be able to land approximately 30 minutes after the first wave. The concept of loading AAVs onto LCACs has been tested and found feasible, although this will remove the LCACs from taking other needed elements of the landing force ashore in the first wave.

Lastly, the more traditional assault option could be used. The element of surprise could be knowingly given up completely if it was assessed that the enemy capability to oppose the landing was not significant or did not have the weapons to endanger the amphibious ships as they deployed the LCUs and AAVs close to shore. All of these options involve significant risk to the landing force due to the potential loss of surprise or the inability to mass forces quickly and decisively. The long-term solution is the development of

an Advanced AAV (AAAV) that can go 25 knots and will return the OTH capability to an ATF. This initiative is well underway but is still many years away from being fully implemented into the fleet.

### Aviation Assets

The Ship-To-Objective Maneuver concept includes using not only landing craft but also aviation assets available in the ATF to move forces deep into enemy territory.<sup>16</sup>

Together with the Sea Based Logistics concept, the future vision eliminates (or reduces significantly) the need to secure ports and airfields. Instead, supplies coming from the ships and going directly to the forces in the field, not necessarily at the beach. As a result, the logistics tail of landing forces will be smaller, ship-to-shore movement will take less time, and movement ashore will not have to wait for the supply base at the beach to be formed prior to continuing operations inland. This concept has many advantages such as the reduction of double handling equipment at the beach that is destined for forward combat forces, not having to establish a supply base on the beach and then having to defend it from ground and air attack, and finally, the capability of allowing the landing forces to operate at an increased tempo and with more operational freedom – a factor that would allow them to avoid combat when is unfavorable or undesirable. In other words, by significantly reducing the time the enemy has to react to the assault by exploiting the space, time, and force factors, we will be able to achieve the decisive points of the operation, not just form a lodgment on the beach.

The aviation assets that will be devoted to movement and logistical resupply of the ground forces do not have the range to adequately support STOM. If we assume that the amphibious task force will remain 25 miles offshore, with at least part of the Marine air-

ground task force's ground element some 40 miles inland, the magnitude of the problem becomes clear.<sup>17</sup> The space/time disadvantage is due to the long distances involved and the slow air speed of the majority of the aviation assets, the CH-46D helicopter. The low lift capacity of this aircraft also limits the cargo (force) that it will carry, mostly troops with little or no additional equipment inside the aircraft. By using the aircraft in an external lift mode, it will not be available to carry an internal load. The CH-53E helicopter is also available for use to move the landing force ashore but this will divert it from its primary function as a heavy lift asset. By doing this, it will further slow the establishment of a firm foothold ashore when heavy equipment and weapons will be needed.

The CH-46 and CH-53 helicopters are not armored and are susceptible to small arms fire. The lack of armor on these aircraft will also detract from their use in a forcible entry environment, a fact made clearly evident during the 1975 rescue of the S.S. Mayaguez that was conducted entirely with CH-53 and HH-53 helicopters. Of the eight helicopters in the initial wave (five CH-53s and three HH-53s), all but one was destroyed or had received some damage.<sup>18</sup> Of the original, eight helicopters used in the first wave, only three were available for further operations that day. With this type of attrition, logistics will be forced to rely more on the surface craft than on the aviation assets to get the materiel ashore. The landing craft will become quickly over tasked since they will already be fully employed in landing the rest of the ground combat forces and the supplies they need ashore. Thus, the landing force will be left short of essential supplies earmarked for air delivery to ground forces until a secure landing zone can be established and maintained, essentially creating the supply base that the STOM and sea based logistics are trying to avoid.

Possible solutions to these problems involve the fielding of a replacement for the CH-46, the MV-22, which is currently in testing, the possible use of a Forward Area Refueling Point (FARP), or reconfiguring the air wing. The MV-22 looks to be the best solution for the replacement of the CH-46. It has twice as much lift capability than the CH-46 and can fly at speeds up to 250 knots. Its high rate of speed contributes significantly in the form of rapid buildup of combat power ashore. It is more survivable from ground fire and enemy helicopters due to its higher rate of speed and ability to clear the area faster. The concept of using a FARP for long-range missions has been around for quite some time. Using this refueling method during the initial phase of a forcible entry is not feasible but may suffice after ground forces secure an area near the beach. Lastly, by reconfiguring the air wing that deploys with the Marine Air Ground Task Force (MAGTF), more CH-53s will be available to support STOM and sea based logistics. By substituting or augmenting the CH-53 for the CH-46, it would allow forces to seize objectives far inland quickly and thereby reduce the logistical effort needed by those forces. While there are very limited CH-53s in the USMC inventory, this will work for a limited operation that has objectives far inland. The continued practice of providing armed escorts for the transports in the form of Cobra attack helicopters and Harrier fixed-wing aircraft will reduce the ground fire but will never eliminate it. Only the continued push for development of a long-range, heavy lift, well protected aircraft will bring the concepts of STOM and sea based logistics to fruition and ensure the success of a forcible entry operation.

### Conclusion

As the world transitions into the 21<sup>st</sup> Century and the hope that it brings, the reality of regional conflict remains. With our ability to influence these conflicts and resolve them

peacefully, the Navy's mission is clear: maintain a forward naval presence and interdict when ordered by the NCA. While the majority of these operations will take the form of MOOTW and be peaceful in nature, there exists the potential of using the forcible entry option to achieve our objectives. While we have been highly successful in these types of operations in the 20<sup>th</sup> Century, our ability to achieve the same results in the 21<sup>st</sup> Century is currently suspect.

The current amphibious doctrine needs to be updated to reflect the concepts of Operational Maneuver From The Sea, Ship-To-Objective Maneuver, and Sea Based Logistics. These concepts are the backbone of our amphibious forces and the reality of the current philosophy in amphibious warfare. Without the forces needed to make the forcible entry option a reality, we fail in our ability to project our forces adequately and interject in conflicts as needed.

Our landing craft and aviation assets are not up to the challenge of a forcible entry operation. With some of our assets dating back to the 1960's in both technology and age, we have failed to keep the force modernized and fully mission capable. While their lack of lift, range, speed, and protection may not be an issue in the often-benign environments of MOOTW, these same limitations may seriously jeopardize a forcible entry operation.

Possible temporary solutions are available for some of these shortfalls and limitations but will not ensure success under all conditions. Aggressive development of new technology and a commitment to replace aging equipment will ensure our forces of the 21<sup>st</sup> Century are ready and capable of achieving success on the battlefield of tomorrow. Until these problems can be corrected through the fielding of new equipment, the Joint Forces Commander must understand the limitations of today's forces and plan on exploiting those operational

functions and elements that are available today. The areas of intelligence, fires, and deception along with a technologically advanced command and control capability will ensure our success in future operations. The ability to enlist the aid of foreign coalitions and the unique advantages of our other services, specifically the air assault forces from the Army, will create an overwhelming a force capable of handling all future requirements for a forcible entry operation.

## NOTES

<sup>1</sup> Christopher M. Wode, "The Forward Warriors – The United States Must Revitalize Its Amphibious Fleet," Armed Forces Journal, (March 1994): 25.

<sup>2</sup> Ibid, 25.

<sup>3</sup> Robert d. Heinl, Jr., "Victory at High Tide: The Inchon-Seoul Campaign," (New York: J.B. Lippincott, 1968), 3.

<sup>4</sup> Wode, 25.

<sup>5</sup> Headquarters, U.S. Marine Corps, "Operational Maneuver From The Sea (OMFTS) Concept, MCRP 0-1 (Washington, DC: 1 December 1995), 4.

<sup>6</sup> William S. Huggins, "Forcible Entry in the Age of Jointness," Marine Corps Gazette, (March 1994): 35.

<sup>7</sup> Theodore L. Gatchel, "At the Water's Edge," (Annapolis, MD: Naval Institute Press, 1996), 177.

<sup>8</sup> Department of the Navy, DON Integrated Amphibious Operations and USMC Air Support Study, (Washington DC: 1990), 64.

<sup>9</sup> James A. Lasswell, "Are We Building Enough Amphibs To Implement ...From The Sea," Amphibious Warfare Review, (Summer/Fall 1994): 44.

<sup>10</sup> Ibid.

<sup>11</sup> J. Scott Cramer, "An Atrophied Capability," Marine Corps Gazette, (November 1999): 86-87.

<sup>12</sup> T. J. McKearney, "The Gator Stumbles," U.S. Naval Institute Proceedings, (January 1994): 40.

<sup>13</sup> Joseph H. Alexander, "Amphibious Warfare: What Sort of Future?," U.S. Naval Institute Proceedings, (February 1982): 66.

<sup>14</sup> Peter J. Frothingham, "The Revolution in Amphibious Warfare," Surface Warfare Magazine, (September/October 1999): 6-7.

<sup>15</sup> Alexander, 67.

<sup>16</sup> Headquarters, U.S. Marine Corps, 7-8.

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<sup>17</sup> Carl E. Mundy, Jr., "Getting It Right – From the Sea," U.S. Naval Institute Proceedings, (January 1994): 71.

<sup>18</sup> J.M. Johnson, Jr., R.W. Austin, D.A. Quinlan, "Individual Heroism Overcame Awkward Command Relationships, Confusion, and Bad Information off the Cambodian Coast," Marine Corps Gazette, (October 1977): 32.

## BIBLIOGRAPHY

- Alexander, Joseph H. "Amphibious Warfare: What Sort of Future?" U.S. Naval Institute Proceedings, (February 1982): 66.
- Cramer, J. Scott. "An Atrophied Capability." Marine Corps Gazette, (November 1999): 86-87.
- Frothingham, Peter J. "The Revolution in Amphibious Warfare." Surface Warfare Magazine, (September/October 1999): 6-7.
- Gatchel, Theodore L. At the Water's Edge. Annapolis: Naval Institute Press, 1996.
- Heinl, Robert D., Jr. Victory at High Tide: The Inchon-Seoul Campaign. New York: J.B. Lippincott, 1968.
- Huggins, William S. "Forcible Entry in the Age of Jointness." Marine Corps Gazette, (March 1994): 35.
- Johnson, J.M., Jr., R.W. Austin, D.A. Quinlan. "Individual Heroism Overcame Awkward Command Relationships, Confusion, and Bad Information off the Cambodian Coast." Marine Corps Gazette, (October 1977): 32.
- Lasswell, James A. "Are We Building Enough Amphibs To Implement ... From The Sea." Amphibious Warfare Review, (Summer/Fall 1994): 44.
- McKearney, T. J. "The Gator Stumbles." U.S. Naval Institute Proceedings, (January 1994): 40.
- Mundy, Carl E., Jr. "Getting It Right - From the Sea." U.S. Naval Institute Proceedings, (January 1994): 71.
- U.S. Marine Corps Headquarters. Operational Maneuver From The Sea (OMFTS) Concept. MCRP 0-1. Washington, DC: 1995.
- U.S. Navy Department. DON Integrated Amphibious Operations and USMC Air Support Study. Washington, DC: 1990.
- Wode, Christopher. "The Forward Warriors - The United States Must Revitalize Its Amphibious Fleet." Armed Forces Journal, (March 1994): 25.